

Appendix A: Choosing Performance Measures

Introduction

Selecting Performance Measures for your program often presents difficulties to program managers -- the first time they have to do it. Yet this part of planning forms the most essential part of the planning process. Good Performance Measures guide the program to success in planning and execution of the proposed actions.

This paper will give you a headstart on identifying good Performance Measures for your program. Once you've completed this part of the planning process, you will move on to figuring out what you want to do to improve your program's performance, as measured by these Performance Measures.

Performance Measures: What Are They?

Your program provides services that improve, in some way, the quality of life of its customers. Performance Measures simply give you the means to know how well the program is doing at providing those services and improving those lives. A good Performance Measure gives the program manager and staff the ability to make changes and see whether those changes improve the program's performance; that is, its ability to improve customers' quality of life. Good Performance Measures give you the ability to make changes, see the results of those changes, then plan and change again, based on solid knowledge, rather than guesswork and intuition.

Now, a key aspect of Performance Measures: they're data.

That may seem self-evident, but many program managers falter in this area. They come up with many good things they want to improve, and maybe with some ways that one could see whether the program has improved or not, but they have no way to quantitatively measure the program's performance.

To start our investigation and definition of Performance Measures, let's first look at a way to categorize them: the Data Quadrant.

The Data Quadrant

Mark Friedman uses a “data quadrant” to categorize data and find the best for measuring performance. The Data Quadrant is shown at the right.

The top row of the data quadrant identifies data that measure inputs to the program; the bottom row identifies data that measures output of the program. The left hand column contains measures of the quantities of inputs and outputs; the right hand column contains measures of the quality of inputs and outputs. This can be confusing, so let’s look at some examples.

Number of clients served. First, is this an input or an output? An input, of course; it tells us how many clients came into our program and nothing else. It doesn’t measure whether we changed their lives in any way; it simply says, “This many people came into the program.” So this is, first, an input (upper row) and a quantity (left-hand column).

Number of certified counselors in the program. Well, this is an input to our program -- how many certified counselors do we have to help our program succeed? Again, it doesn’t tell us how well the program does. But this does give us a measure of the quality of this input -- more certified counselors is qualitatively better than fewer. So this measure goes into the upper-right hand quadrant.

While these two measures tell us something about our program, they really don’t tell us anything about how good our program is, considered from the client’s point-of-view. We want to find performance measures that tell us how good the output of our program is; how we improve conditions of well-being of the people we serve. These performance measures fall into the bottom row of the Data Quadrant, the row titled, “Output.”

When we measure outputs, we can, as with inputs, measure a quantity and a quality. In fact, most measures of output quantity are raw numbers: # of participants completing the program, # of people who quit smoking, # of babies born full-term. Each of these provides some measure of whether the program is accomplishing its purpose. If 100 participants finish our program, 200 people

The Data Quadrant

	Quantity	Quality
Input (means)		
Output (ends)		

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quit smoking as a result of our program or 75 babies of mothers in our program are born full-term, that's good. Performance Measures that give us the quantities of outputs go into the lower left-hand quadrant.

But the question remains: how good? Raw numbers generally don't tell us enough about the quality of our program. For instance, if 20 people in our smoking-cessation program succeed in their effort to stop smoking, does that mean our program is good or not? Well, if 2000 people started the program and only 20 did succeed, that's maybe not so good. If 25 people started and 20 succeeded, that's probably pretty good. So we measure quality, almost always, as the percentage of people who improve compared to the number involved.

In the example above, if 2000 people started our smoking-cessation program and 25 quit, the percentage of people who quit is $25/2000$: 1.25%. If 25 people start our program and 20 quit, that's a success ratio of $20/25$: 80%. Comparing these two outcomes, what can we say about the performance of our program? We certainly can say that a program with an 80% success rate performs better than one with a 1.25% rate. These "quality-of-output" measures go into the lower right-hand quadrant.

To best measure a program's performance, we would like to find measures that fall into the lower-right hand quadrant; those that tell us how many clients have benefitted from our program compared to how many clients were in the program.

You'll note that there is almost always a 1:1 correspondence between measures in the lower-left hand corner (raw numbers) and the lower-right hand corner.

A Data Quadrant Example

Below is a completed Data Quadrant, for a fictional program called the “Get a GED” program (this expands on the Data Quadrant used in the full “How-to” paper. This program provides classes and tutoring to residents of Wyoming who would like to take and pass the GED examination. Look at the Performance Measures defined for this program, and try to answer why they ended up in the quadrants they did.

The Data Quadrant

	Quantity	Quality
Input (means)	# of residents entering the GED program # of employers supporting the program	# of certified instructors for GED classes # of tutors available to participants # of classes offered # of locations at which classes are offered
Output (ends)	# of students completing the class # of students taking the GED exam # of students passing the GED exam # of employers offering classes on-site to employees	% of students completing the training % of students taking the GED exam % of students passing the GED exam % of employers offering classes on-site to employees

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Let's go through each of these measures to discuss their placement in the Data Quadrant.

Performance Measure	Comments
# of residents entering the GED program	<p>This Performance Measure simply measures how many people entered the program. It doesn't give us any indication of how well they did once they were in the program, so it's not a great Performance Measure of the program.</p> <p>This data would tell us something about an input to the program, so it falls into the Quantity/Input quadrant; the upper left-hand one.</p>
# of employers supporting the program	<p>Again, this measure tells us something about a quantity of input to our program: how many employers provide support to their employees. It doesn't say anything about how good our program is at improving the lives of the participants, or the well-being of the employer. It also falls into the Quantity/Input quadrant.</p>
# of certified instructors for GED classes	<p>This gives us insight into the quality of an input -- if we assume that certified instructors are better than non-certified ones, then the quality of the input -- instructors -- will be higher if more of them are certified.</p>
# of tutors available to participants	<p>The more tutors available to participants, the better the quality of tutoring, so we can put this measure in the Input/Quality quadrant.</p>
# of classes offered	<p>Again, we believe that the more classes we offer, the better our program, so we put the number of classes in the Input/Quality quadrant.</p>
# of locations at which classes are offered	<p>And we believe that our program will be better if we can offer classes at many different locations, so we choose a Performance Measure that reflects this belief: the number of locations.</p>

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Performance Measure	Comments
# of students completing the class % of students completing the class	<p>Output measures have two facets: the raw number (“# of participants completing the training”) and a measure of the quality of the output (“% of participants completing the training.”)</p> <p>For instance, if we measure the number of participants completing the training, and find that 50 did so, we can measure that and say that it’s good that those 50 completed. However, it’s the percentage that really tells us how good our program is. If that 50 represents, say, 5% of the number of people who started the program, we’d have to question just how good our program did; 2500 people started and only 50 finished. On the other hand, if that 50 people represents 90% of the people who started the program, we can say that our program is doing pretty well at retaining its students.</p> <p>The raw number (50, in this case) tells part of the story; comparing the raw number completed to the number who started tells us something about the quality of our program’s efforts to retain students.</p>
# of students taking the GED exam % of students taking the GED exam	<p>Again, the raw number tells us something, but the number of students who actually took the GED exam expressed as a percentage of the number of students who started the program tells us something about the quality of our program’s efforts to get students ready and confident to take the test</p>
# of students passing the GED exam % of students taking the GED exam	<p>The percentage of students who start the “Get a GED” program, who actually pass the GED exam, tells us about the performance of our program in preparing students for the test.</p>

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Performance Measure	Comments
# of employers offering classes on-site to employees % of employers offering classes on-site to employees	This measure gives us a Performance Measure for our efforts to get employers to support the Get a GED program in their places of work. Again, the percentage measure provides the most powerful quality measure of this aspect of our program.

Not-so-good Performance Measures

The Performance Measures used in our Get a GED example are good ones, particularly those in the lower right-hand quadrant corner. The Performance Measures below are not so good, though. See if you figure out why.

- ▶ Number of people participating in the program
- ▶ Healthier babies
- ▶ Number of smokers in Wyoming
- ▶ Lower unemployment in Wyoming

Let's think about why these are "not-so-good" Performance Measures.

The first one ("Number of people participating in the program") doesn't tell you anything about how well your program delivers services to these people. If every person in Wyoming participates in your program, but gets nothing out of it, that indicates a big program with not-so-good performance. You want your Performance Measures to measure how well your program improves people's lives, not how big it is.

The second measure ("Healthier babies") gives no way to measure "healthier." Is it fewer visits to the Emergency Room, higher birthweights, more preventative doctor visits, more immunization, lower incidence of flu? Performance Measures must be quantifiable; you must be able to measure, not guess, and to do that, they must be data-driven.

The third ("The number of smokers in Wyoming," for a smoking-cessation program) measures the wrong thing. You want a measure of such a program to indicate how well your program does at helping participants stop smoking; your program can have no affect on a smoker who doesn't enter the program. So a global, population-wide measure such as this won't help you understand how well your program does with the people who enter it trying to quit.

And the fourth ("Lower unemployment in Wyoming") is also way too broad.

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Sure you can measure unemployment, but there are so many factors over which you have no control that this measure doesn't tell you anything about how well your job-training program is helping those people who join it.

Key Points about Performance Measures

- ▶ Choose Performance Measures that do just that: measure the performance of your program and only your program. Don't include measures of quality of life that you can't control.
- ▶ Performance Measures have to be data. When you select a Performance Measure, think, "Can we actually plot this data on a chart?" If you can't plot it on a chart, it will do you little good as a measure of your program's performance.
- ▶ Select Performance Measures from the upper-right and lower-right corners of the Data Quadrant.

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